



Department of Energy

Bonneville Power Administration
P.O. Box 61409
Vancouver, WA 98666-1409

TRANSMISSION BUSINESS LINE

August 3, 2004

In reply refer to: T-DITT-2

To: Landowners interested in the SnoKing Substation

Bonneville Power Administration has installed the Sound Seal Acoustic mats around portions of the SnoKing transformer bank to determine their effectiveness in reducing noise generated by the SnoKing Substation located in Bothell, Wash. This letter provides information about the installation of the sound mats and an update on BPA's ongoing substation noise investigation.

Sound Seal Acoustic Mats

On May 15, substation maintenance crews installed 15 (4'x 16') sound mats around portions of the SnoKing transformer bank. Measurements taken at the substation fence line showed a 6-10 dbA reduction on the north side and 3-4 dbA reduction on the south side. The mats were adjusted in order to receive maximum reduction.

Since then, BPA purchased and installed 15 additional mats on the remaining exposed north and south sides of the transformer. The additional mats were installed during a scheduled outage on July 17 to achieve a greater noise reduction for landowners affected by the noise. Sound measurements were taken at more than a dozen locations days after the July 17 installation, including landowner property lines. Those measurements show an average of 3-6 dbA noise reduction. The lowest landowner property measurement recorded was 37.7 dbA and the highest was 58.5 dbA.

The blankets have made an improvement on the noise and BPA is now focusing its efforts on a permanent solution.

SnoKing Substation Permanent Solution

It is BPA's goal to have this transformer bank operate and perform like similar transformer banks. Ideally BPA would like the transformer to operate at 70 dbA or less at the bank and meet the Snohomish county noise standard of 55 dbA at all receiving properties. BPA is still investigating the direct current (DC) that is causing the excessive noise at the SnoKing transformer bank. Although our transmission system is an alternating current (AC) system, test have shown small amounts of DC current appear to be on the system.

A possible permanent solution is to install a device that eliminates the effect of the DC current on the transformers. This device was designed and created by BPA engineers and went through preliminary testing during the July 17 outage. The results exceeded our expectations in reducing the noise. By installing the device, BPA hopes to reduce the noise by 10-20 dbA. The device is currently going through additional testing to ensure it will meet our needs. The device needs to

reduce noise and be fully automated so that DC levels are adjusted without human intervention. BPA anticipates resolving the technical issues and installing the device by the end of 2004.

Public Meeting

BPA does not plan to hold an additional public meeting at this time. Landowner comments and noise measurements show that the mats have improved the noise for affected landowners. You may continue to contact BPA if you have questions or concerns.

For More Information

If you have questions or would like more information about the project, please call our toll-free number 1-888-276-7790. Additional information is posted on our Web site at: http://www.transmission.bpa.gov/PlanProj/Transmission_Projects/. BPA will continue to inform the public on any new developments.

Sincerely,

/s/ Doug Riehl, August 3, 2004

Doug Riehl
Project Manager

Enclosure:
April 29 Question and Answer